

CLAIM

1. An animation system which is sound activated, the system comprising:

an input circuit for receiving an input sound signal;

a sampler for sampling the input sound signal;

a processor for generating a value characteristic of each sample;

a comparator for comparing each value to a plurality of pre-stored value ranges each corresponding to a predetermined graphic; and

a display interface for displaying said predetermined graphics corresponding to each value sequentially;

wherein, for every sample of the input sound signal, the corresponding graphic is displayed substantially simultaneously therewith, so as to generate an animation sequence synchronised with the input sound signal.

2. An animation system according to claim 1 wherein the input sound signal is an analog signal and the sampler comprises an analog to digital converter.
3. An animation system according to claim 1 wherein the processor is arranged to generate a value characteristic of each sample by multiplying the sample by a window, performing a transform on the resultant signal to obtain a plurality of coefficients, and determining the maximum magnitude of the coefficients; the calculated value

then being compared to the plurality of stored values.

4. An animation system according to claim 3 wherein the sample is a digitised signal which is multiplied by a Hamming window and wherein the transform is a Fast Fourier Transform which generates a plurality of Fourier coefficients.
5. An animation system according to claim 1 wherein the predetermined graphic is a mouth graphic representing a character's mouth.
6. An animation system according to claim 5 wherein the display interface is arranged to display the predetermined graphics superimposed upon a display of an animated character or object.
7. An animation system according to claim 6 wherein the display interface comprises a monitor on which a software generated display window is shown, the animated character and the predetermined graphics being displayed within the display window.
8. An animation system according to claim 1 wherein the predetermined graphics are stored in a specified directory on a hard drive of a computer.
9. An animation system according to claim 8 wherein a plurality of sets of predetermined graphics, each corresponding to a basic expression of an animated character, are stored in respective sub-directories.
10. An animation system according to claim 9 including a software based user interface for allowing the user to select a desired one of a plurality of character expressions, the system selecting the set of predetermined graphics corresponding to the selected expression.